

Amendments to the Claims:

JC17 Rec'd PCT/PTO 14 JUN 2005

This listing of claims will replace all prior versions and listings of claims in this application:

1. (Currently Amended) ~~Ink~~ An ink jet printhead comprising:

a driving and encoding circuit (20) having a grid-like structure including a plurality of inputs (23) and a plurality of selecting elements (12),

a plurality of actuating elements (11) associated with said driving and encoding circuit, (20) and suitable for being selectively addressed and commanded by said selecting elements (12) in response to ~~given~~ at least one command ~~signals~~ signal received through said plurality of inputs (23), so as to cause the ejection of ink droplets from said ink jet printhead,

and at least one identifying element (21) of said ink jet printhead,

~~characterized in that wherein~~ each of said identifying elements (21) of said ink jet printhead is associated with a corresponding selecting element (12) of said driving and encoding circuit (20), to be selectively addressed and identified in response to at least one corresponding identifying ~~signals~~ signal received through said plurality of inputs (23).

2. (Currently Amended) ~~Ink~~ The ink jet printhead according to claim 1, ~~characterized in that wherein~~ said plurality of actuating elements (11) and each of said identifying elements (21) are suitable for being sounded through at least one corresponding ~~control~~ command signal received through said plurality of inputs (23), during a preliminary checking step, the purpose of which is to identify said ink jet printhead and to confirm the correct operation of said actuating elements (11).

3. (Currently Amended) ~~Printhead~~ The ink jet printhead according to claim 1, ~~characterized in that wherein~~ said actuating elements (11) are resistors and said ink jet printhead is of the thermal, bubble type for activating the ejection of said ink droplets.
4. (Currently Amended) ~~Head~~ The ink jet printhead according to claim 1, ~~characterized in that wherein~~ said identifying elements (21) are made of a plurality of resistors, each ~~one resistor~~ having a resistivity that has been selectively set during ~~the a~~ manufacturing process of said ink jet printhead, depending on its characteristics.
5. (Currently Amended) ~~Head~~ The ink jet printhead according to claim 1, ~~characterized in that wherein~~ said identifying elements (21) occupy positions of the ~~grid~~ grid-like structure that are located in correspondence with nozzles (31) not used for printing.
6. (Currently Amended) ~~Ink~~ An ink jet printhead comprising:
  - a driving and encoding circuit (20) having a grid-like structure and including a plurality of inputs (23), a plurality of selecting elements (12), ~~and~~ a plurality of actuating elements (11) suitable for being selectively addressed and commanded by said selecting elements (12) in response to ~~given at least one~~ command ~~signals~~ signal received through said plurality of inputs (23), so as to cause the ejection of ink droplets from said ink jet printhead, and at least one identifying element (21) of said ink jet printhead,
  - ~~characterized in that wherein~~ each of said identifying elements (21) of said ink jet printhead is associated with a corresponding selecting element (12) of said driving and

encoding circuit (20), for being selectively addressed and identified in response to at least one corresponding identifying ~~signals~~ signal received through said plurality of inputs (23).

7. (Currently Amended) ~~Integrated~~ An integrated ink jet printhead comprising:

a plurality of actuating elements (11) for causing ~~the~~ ejection of ink droplets from said ink jet printhead, a driving and encoding circuit (20), having a grid-like structure, for selectively addressing and commanding each of said actuating elements (11), said grid-like structure being organized into rows and columns that define a plurality of nodes corresponding to said actuating ~~means~~ elements, and one or more identifying elements (21) of said head ink jet printhead,

~~characterized in that~~ wherein said one or more identifying elements (21) of said head ink jet printhead correspond to nodes arranged, ~~one behind the other~~, along a given row or column of said grid-like structure, and ~~in that~~ further wherein said one or more identifying elements (21) are also provided for being scanned, together with said actuating elements (11), during a preliminary checking step, the purposes of which are both to identify said ink jet printhead and to confirm correct operation of said actuating elements (11).